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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,226	11/28/2003	Chao-Chin Liu	WISP0041USA	1225
27765	7590	02/03/2005	EXAMINER	
NORTH AMERICA INTERNATIONAL PATENT OFFICE (NAIPC)			LE, DINH THANH	
P.O. BOX 506			ART UNIT	
MERRIFIELD, VA 22116			PAPER NUMBER	
			2816	

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/707,226

Applicant(s)

CHAO-CHIN LIU

Examiner

DINH T. LE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-14 and 19-21 is/are allowed.
- 6) ☒ Claim(s) 1-11 and 15-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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## DETAILED ACTION

### *Specification*

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 and 15-18 are rejected under 35 USC 103 (a) as being unpatentable over Osuga (US 6,779,046) in view of Dabral et al (US 6,278,312).

Osuga discloses in Figures 1-3 a master and slave bus comprising:

- a master bus (12) for generating a clock signal (SCL) on a smart bus;
- a slave bus (14) comprising a filter (30) for eliminating noise in the clock signal (SCL).

However, Osuga does not disclose that the filter comprising a combination of a conduction line module and a voltage detection circuit as recited in claim 1.

Nevertheless, Dabral et al discloses in Figures 1-3 a filter circuit for removing common mode noise, see lines 44-60, column 1, comprising:

- a conduction line module comprising the bus (DATA 135) and a conduction line (VREF

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135) disposed along the bus, the bus having a first end for inputting the clock signal and the conduction line having a first end connected to a reference voltage (VREF); and

- a voltage detection circuit (160) electrically connected to second ends of the bus and the conduction line of the conduction line module for generating an amended clock signal (165) by determining a voltage difference between the second ends of the bus and the conduction line.
- wherein the conduction line is disposed in parallel with the bus;
- wherein the reference voltage is generated from a reference circuit which comprises a first resistor (110) and a second resistor (105); and
- wherein the voltage detection circuit comprises an operational amplifier (160)

It would have been obvious to a person having skill in the art at the time the invention was made to employ the filter circuit (102, 135, 160) taught by Dabral et al in the circuit of Osuga for the purpose of removing common noise coupled to the clock signal (SCL).

With regard to claims 7-8, although Osuga does not disclose that the bus master is a south bridge circuit or a key-board controller; however, Osuga suggests on lines 20-30, column 1, that the master device is a controller such as a microcontroller. Since, the key-board controller and the south bridge circuit are the controllers, a skilled artisan realizes that the modified circuit of Osuga can be used to operate with the south bridge circuit or the key-board controller depending on a particular environment or an application in which the modified circuit of Osuga is to be used. It would have been obvious to a skilled artisan at the time the invention was made to select the south bridge circuit or the key-board controller in the circuit of Osuga for the purpose of accommodating with the requirement of a predetermined system

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***Allowable Subject Matter***

Claims 12-14 and 19-21 are allowed because the prior art of record does not show the voltage averaging circuit in the combination as recited in claims 12 and 19.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DINH T. LE whose telephone number is (571) 272-1745. The examiner can normally be reached on Monday-Friday (8AM-7PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY CALLAHAN can be reached at (571) 272-1740.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DINH LE  
Primary Examiner